Date: March 4<sup>th</sup>, 2014

**From:** Brad Shields – Chief Technology Officer

Blue Ridge Electric Membership Corporation

**Chief Operating Officer** 

RidgeLink, LLC

**To:** Federal Communications Commission (FCC) Staff

**Subject:** Expression of Interest – Rural Trials

Docket No. 10-90

#### **Background**

Blue Ridge Electric Membership Corporation ("Blue Ridge Electric"; www.blueridgeemc.com) is an electric cooperative servicing about 75,000 metered accounts in Caldwell, Watauga, Ashe, Alleghany, and Wilkes Counties in North Carolina. The cooperative also has Blue Ridge Energies which serves our territory and beyond with propane and fuel oil products, and RidgeLink, LLC ("Ridgelink"; www.ridgelinkllc.com http://www.blueridgeemc.com/ridgelink) which serves NW NC and NE Tennessee with fiber optic dark fiber and co-location services for wireless providers on the cooperatives poles and substations. Blue Ridge Electric and RidgeLink are dedicated to economic development in the rural areas we serve. With the recent loss of Gates Rubber Manufacturing and United Chemi-Con, our territory continues to struggle with job growth and economic development for our membership.

RidgeLink has constructed many miles of fiber optic infrastructure for use in our internal operations and for connecting schools, hospitals, libraries and Boards of Education with broadband data connections. We have used partnerships with North Carolina initiatives from MCNC (www.mcnc.org) and the Education and Research Consortium of the Western Carolinas, Inc ("ERC"; www.ercwnc.org) to light the fiber infrastructure we build to these locations. RidgeLink needs to continue to build fiber optic infrastructure to bring economic growth through broadband connectivity to our distressed areas. We need to finish redundant fiber optic rings in NW NC and NE Tennessee that we have started to ensure reliability of the internet connection. We also feel the need to bring free or greatly reduced WIFI to the downtown areas of the small towns that need growth. Google has done this in several cities including Lenoir, NC, in our territory. Free WIFI in these small towns would help those that cannot afford a broadband connection at their home to have a place to connect a computer to the internet for education growth. The downtown WIFI connections would also help tourism, which is a major industry for our area, which in turn will help sustain small business in these towns. RidgeLink would provide the fiber optic infrastructure and the WIFI access points and would partner with ERC and other carriers to provide the broadband connectivity.

ERC is a non-profit 501(c)(3) organization that provides fast, reliable and secure fiber-based network services across education, healthcare, government, and economic development communities, with a vision to increase the adoption of new technology and further broadband efforts in rural America.

RidgeLink and its partner ERC will have ETC licensing necessary to provide voice, data and video necessary for these requirements set forth by the FCC.

#### **Geographic Territory**

Blue Ridge Electric and RidgeLink are proposing to serve anchor institutions and small cities with broadband capabilities in partnership with providers of lit services in NW North Carolina and NE Tennessee (Carter, Johnson and Sullivan Counties currently). These counties include Alleghany, Ashe, Watauga, Avery, Wilkes, Mitchell and McDowell Counties in NC and Carter and Johnson Counties in Tennessee. We presently serve some schools, hospitals, Boards of Education, one university, and community colleges through our partnerships with service providers.

### List of Anchor Institutions Presently Served by Blue Ridge Electric/Ridgelink

**Schools** – Appalachian State University, Caldwell Community College – Watauga Campus, Wilkes Community College – Sparta Campus, Alleghany High School, Alleghany County Board of Education, Ashe County Board of Education, Watauga County Board of Education, Watauga County High School, Avery County High School, Avery County High School, Avery County Board of Education, Crossnore Academy

**Hospitals** – Cannon Memorial Hospital

Libraries - Watauga County Library, Alleghany County Library

Government Centers – Avery County Offices, Avery County Jail

#### <u>List of Community Anchor Institutions Presently Served by ERC</u>

**Schools** – Asheville Buncombe Technical Community College, Asheville Christian Academy, Asheville School, Avery County Schools, Carolina Day School, the Cooperative Institute for Climate and Satellites (NC State University), Haywood County Schools, Mayland Community College, Montreat College, Renaissance Computing Institute, University of North Carolina at Asheville, Warren Wilson College, Western Carolina University

*Hospitals* – Angel Medical Center, Blue Ridge Regional Hospital, Madison County Health Systems, Mission Health, Transylvania Regional Hospital, Yancey County Health Systems

**Libraries** - Buncombe County Libraries (10 locations)

**Government Centers** – Avery County, Buncombe County, City of Asheville, City of Asheville Police, Department of Homeland Security, Drug Enforcement Agency, Land of Sky Regional Council, McDowell County, North Carolina Courts (4 locations), North Carolina Information Technology Services, Town of Biltmore Forest, Town of Black Mountain, Transylvania County

Non-Profits – Arcade Credit Union, Asheville Buncombe Community Christian Ministries, Asheville Symphony, Bent Creek Institute, Biltmore Baptist Church, Blue Ridge Food Ventures, CarePartners, Community Action Opportunities, the Community Foundation of Western North Carolina, Education and Research Services, French Broad Electric Membership Corporation, Grandfather Mountain Stewardship Foundation, Meals on Wheels, Mountain Area Information Network, North Carolina Biotechnology Center, Trinity Baptist Church, the United Way, Western Region Education Service Alliance, YMCA of Western North Carolina

#### List of New Anchor Institutions That Will Be Served Under CAF Funding

Alleghany County – Glade Creek School, Piney Creek School, Town Of Sparta for WIFI project

Ashe County – Ashe County High School, Ashe County Middle School, Blue Ridge Elementary, Mountain

View Elementary, Westwood School, Town of West Jefferson for WIFI project, Town of Lansing for WIFI

project, Ashe County Library

**Watauga County** – Hardin Park Elementary, Mabel Elementary, Green Valley Elementary, Bethel Elementary, Parkway Elementary, Blowing Rock Elementary, Western Watauga County Library and Community Center, Watauga Medical Center, Blowing Rock Hospital

**Avery County** – Newland Elementary, Avery County Library, Lees McRae College, Town of Crossnore for WIFI project, Town of Newland for WIFI project

Mitchell County – Mitchell County Schools, Mitchell Avery Regional Library, Mitchell County Library Johnson County, TN – Johnson County Public Library

Wilkes County, NC – Wilkes Community College, Wilkes County Public Library McDowell County Schools and Libraries

**East Tennessee State University** 

**Johnson City Medical Center** 

#### **Proposed Technology**

Blue Ridge Electric and RidgeLink propose 802.11 N WIFI feed by fiber optics to the small downtown areas in ten rural communities. We will partner with a lit service provider, ERC, to bring this broadband capability to these downtown areas. We have also identified schools, libraries, and hospitals in our territory that would benefit from a competitive broadband connection. We would also request funding to help complete redundant fiber routes in NW NC and NE Tennessee. We are working on constructing several sections of these routes but will need assistance to complete these redundant routes. These reliable routes will help bring competition into our area to lower the cost of the much needed broadband connectivity.

#### State and/or Local and/or Support for Project

We are currently receiving no funding from governmental institutions for our projects. We did assist two NC initiatives from MCNC and ERC to help with building to some anchor institutions in our area. Their funding for projects was part of BTOP1 and BTOP2. We did not receive any of these funds directly from the government. These projects do leverage the Cooperatives rights of way and infrastructure, which reduces costs and accelerates deployment.

#### **Existing Providers**

There are several providers that overlap our territory in certain areas. We have a telephone cooperative, Skyline Telephone, covering part of our territory in Ashe and Alleghany Counties. We also have Charter Communications that provides high speed voice and data services to some of our members in Watauga County. AT&T serves part of Watauga County also and CenturyLink covers part of our Ashe and Wilkes territories. In many places there is only one provider and in some areas none.

#### **Project Timeline**

Blue Ridge Electric is currently continuing to build out fiber optic infrastructure to support growth in our territory and in Tennessee. We have identified anchor institutions that would benefit from a broadband connection and/or increased competition with their broadband connectivity and small towns that would benefit from a high speed WIFI connection. We are ready to start additional build outs of fiber with funding.

#### **Scalability**

Blue Ridge Electric and RidgeLink would divide this project by territory over a three year period. With proper funding we could possibly move quicker.

## **Total Utility Investment**

Blue Ridge Electric and RidgeLink have invested about \$4.5 million into fiber optic construction in our rural territories and are presently spending an additional \$1 million to reach underserved areas in NW NC and NE Tennessee.

# **One Time Capital Infrastructure Investment**

\$7.5 Million